Kleptoparasitism by White-Tailed Hawk (*Buteo albicaudatus*) on Black-Shouldered Kite (*Elanus caeruleus leucurus*) In Southern Texas

BORJA HEREDIA AND WILLIAM S. CLARK

The White-tailed Hawk (Buteo albicaudatus) is a typical open and semi-open country raptor, inhabiting prairies and sparsely forested habitats from southern Texas to central Argentina. It feeds mainly on mammals [e.g. cottontail rabbits (Sylvilagus floridanus) and rodents], birds [largely Bobwhite Quail (Colinus virginianus) and meadowlarks (Sturnella sp.)], reptiles (mostly snakes but some lizards) and insects (e.g. grasshoppers and crickets) (Bent 1937, Cottam & Knappen 1939, Stevenson & Meitzen 1946). Its main hunting technique is to search the ground from a height of 15-50 m (Oberholser 1974) alternating between straight flapping flight, low angle glides and hovering. It's habit of congregating at prairie fires has been recorded on the Texas coast (Stevenson & Meitzen 1946). However, as far as we know, kleptoparasitism has not been recorded for this species.

We observed kleptoparasitism on 30 December 1982 on the King Ranch between Kingsville and Falfurias, Texas. At about 1100 h we spotted a Black-shouldered Kite (*Elanus caeruleus*) flying level at a height of 20 m carrying prey, probably a small mammal. It was pursued by an immature White-tailed Hawk which was gaining on it. As the hawk neared the kite, the kite dropped it's prey and began to harass the hawk. The kite stooped numerous times at the hawk, which turned over and presented it's talons. Two additional immature White-tailed Hawks appeared and were also harassed by the kite. The kite finally left and the 3 hawks searched unsuccessfully for the dropped prey. After they left, we were also unable to find it.

White-tailed Hawks and Black-shouldered Kites are sympatric over much of their range in North America. Recent studies on a Mexican raptor community (Thiollay 1980) showed that there is an 85% overlap in their hunting habitats. Both select areas of tree cover ranging from < 10 to 40% and grass length between < 20 cm to 80 cm. Their hunting techniques also overlap by 90%, both species being typical searchers and aerial hunters. Both also hunt from perches (Warner & Rudd 1975). Although most of their hunting activity occurs late in the day, both may hunt at any time of day (Thiollay 1980).

Except for the habitual kleptoparasites such as the Crested Caracara (*Polyborus plancus*), typical kites (*Milvus sp.*), sea and fish eagles (*Haliaetus* sp.), and the Bateleur Eagle (*Terathopius ecaudatus*), Brown & Amadon (1968, p.73) state that piracy is rare among birds of prey. But piracy has been recorded for 23 other raptor species (Parmenter 1941, Jeserich 1957, Berger 1958, Meinertzhagen 1959, Temple 1969, Reese 1973, Bildstein and Ashby 1975, Hogg 1977, Brockmann & Barnard

1979, Dunne 1981), and especially for other species in the genus *Buteo*: Red-tailed Hawk (*Buteo jamaicensis*) on Peregrine Falcon (*Falco peregrinus*) (Beebe 1960); Rough-legged Hawk (*B. lagopus*) on Northern Harrier (*Circus cyaneus*) (Kirby 1958); Red-shouldered Hawk (*B. lineatus*) on Common Crows (*Corvus brachyrhynchos*) (Kilham 1982); and Common Buzzard (*Buteo buteo*) on Merlin (*Falco columbarius*) and Sparrowhawk (*Accipiter nisus*) (Cramp & Simmons 1979, p. 182). In addition, Clark has observed piracy of a Red-tailed Hawk on Prairie Falcon (*Falco mexicanus*). The Black-shouldered Kite has previously been recorded as the victim of piracy, being robbed by the Lanner Falcon (*Falco peregrinus*) (Longrigg 1981).

Brockmann & Barnard (1979) pointed out that regular association with other raptor species on or near feeding areas is an ecological factor that appears to promote piracy. Thus the overlap of hunting habitat between the White-tailed Hawk and the Black-shouldered Kite makes this interspecific interaction likely. It would be interesting to know not only how often these encounters occur, but if they are the regular situation.

LITERATURE CITED

- BEEBE, F.L. 1960. An instancy of piracy by the Redtailed Hawk on the Peregrine Falcon. *Condor* 62:480-481.
- BENT, A.C. 1937. Life stories of North American birds of prey. U.S. Nat. Mus. Bull. 167, Part 1. 409 pp.
- BERGER, D.D. 1958. Marsh Hawk takes prey from Short-eared Owl. Wilson Bull. 70:90.
- BILDSTEIN, K.L. AND M. ASHBY. 1975. Short-eared Owl robs Marsh Hawk of prey. *Auk* 92:807-808.
- BROCKMANN, R.J. AND C.J. BARNARD. 1979. Kleptoparasitism in birds. Anim. Behav. 27:487-514.
- BROWN, L.H. AND D. AMADON. 1968. Eagles, Hawks and Falcons of the World. Vol. 1 Country Life Books. London. 414 pp.
- COTTAM, C. AND P. KNAPPEN. 1939. Food of some uncommon North American Birds. Auc. 56:138-169.
- CRAMP, S. AND K.E.L. SIMMONS (eds). 1979. The Birds of the Western Paleartic. Vol 2. Oxford Univ. Press. Oxford. 695 pp.
- DUNNE, P.J. 1981. Kestrel robbing Barn Owl. Raptor Res. 15:22.
- Hogg, R.H. 1977. Food piracy by Red-footed Falcons. Brit. Birds 70:220.

- JESERICH, E. 1957. BAUMFALKE (Falco subbuteo) nimmt Turmfalken (Falco tinnunculus) beute ab. Die Vogelwelt 88:180.
- KILHAM, L. 1982. Florida Red-shouldered Hawk robs American Crows. *Wilson Bull.* 94:566-567.
- KIRBY, R.P. 1958. Rough-legged Hawk takes prey from Marsh Hawk. *Wilson Bull.* 70:382.
- LONGRIGG, T.D. 1981. Piracy and possible predation by the Peregrine on the Black-shouldered Kite. *Ostrich* 52:189.
- MEINERTZHAGEN, R. 1959. Pirates and Predators: The Piratical and Predatory Habits of Birds. Oliver & Boyd. Edimburgh & London. 230 pp.
- OBERHOLSER, H.C. 1974. The Bird Life of Texas. Vol 1. Univ. of Texas Press. Austin, Texas. 530 pp.
- PARMENTER, H.E. 1941. Prairie Falcon parasitizing Marsh Hawk. Condor 43:157.
- REESE, R.A. 1973. Food piracy between Kestrels and Short-eared Owls. *Brit. Birds* 66:227-228.

REYNOLDS, J.F. 1974. Piracy by Lanner. Brit. Birds 67:25.

- STEVENSON, J.O. AND L.H. MEITZEN. 1946. Behavior and food habits of Sennett's White-tailed Hawk in Texas. *Wilson Bull*. 58:198-205.
- TEMPLE, S.A. 1969. A case of Turkey Vulture piracy on Great Blue Herons. *Wilson Bull.* 81:94.
- THIOLLAY, J.M. 1980. Strategies d'exploitation par les rapaces d'un ecosysteme herbace neotropical. *Alauda* 48:221-253.
- WARNER, J.S. AND R.L. RUDD. 1975. Hunting by the White-tailed Hawk *Elanus leucurus*. Condor 77:226-230.
- Museo Nacional de Ciencias Naturales, Castellana 80, Madrid 6, SPAIN. Address of second author: P.O. Box 1161 Annandale, VA 22003.

Received 26 December 1983; Accepted 30 May 1984

OBSERVATIONS OF NESTING PRAIRIE FALCONS IN THE LOS PADRES NATIONAL FOREST

WADE L. EAKLE

PRAIRIE FALCON (*Falco mexicanus*) nesting surveys were conducted by the U.S. Forest Service and California Department of Fish and Game on the Mt. Pinos (MPRD) and Santa Lucia (SLRD) Ranger Districts, Los Padres National Forest during April, May and June, 1981. Nine historical nesting territories were surveyed on the MPRD, of which 4 were active, and 14 historical territories were surveyed on the SLRD, of which 9 were active. An average of 3.3 young hatched per eyrie (N=3). Nine nestlings successfully fledged from these eyries (X=3.0 young per eyrie).

The goal of this study was to survey 2 Ranger Districts on the Los Padres National Forest in southwestern California and determine activity at each eyrie nd productivity at 3 eyries. Productivity parameters provide a measure of reproductive success and allow comparisons with earlier determinations for the same populations (Johnson, 1978).

The survey area encompasses prairie falcon nesting territories in Santa Barbara, Ventura, San Luis Obispo and Kern counties, California.

Prairie falcon eyries were located and plotted on topographical maps during 1979 (Alten and Keasler, 1979). Observation points for viewing the eyries were chosen that provided viewing directly into nest cavities at distances ranging from 30 m up to 1 km. Disturbances were minimized by not climbing to eyries. Observation periods were restricted to 2 h in length. Observations were made with Bushnell 10x50 Explorer binoculars and a Bushnell 20-45x Zoom Spacemaster spotting scope.

Prey remains and reguriated pellets were collected from 2 eyries. Adult Prairie Falcons at BC-1 were observed bringing 1 horned lizard (*Phrynosoma* sp.), 4 ground squirrels (*Spermophilus* sp.) and 1 unknown prey item to the eyrie. At VV-8, adult falcons delivered 3 ground squirrels and 1 western meadowlark (*Sturnella neglecta*) to the eyrie.

Observation points for viewing the eyries were chosen that provided viewing directly into nest cavities at distances ranging from 30 m up to 1 km. Disturbances were minimized by not climbing to eyries. Observation periods were restricted to 2 h in length. Observations were made with Bushnell 10x50 Explorer binoculars and a Bushnell 20-45x Zoom Spacemaster spotting scope.

Prey remains and reguriated pellets were collected from 2 eyries. Adult Prairie Falcons at BC-1 were observed bringing 1 horned lizard (*Phrynosoma* sp.), 4 ground squirrels (*Spermophilus* sp.) and 1 unknown prey item to the eyrie. At VV-8, adult falcons delivered 3 ground squirrels and 1 western meadowlark (*Sturnella neglecta*) to the eyrie.

Reuse of Nesting Territories and Eyries. — Three of the 22 known nesting territories have remained active since 1977. Two have remained occupied for 4 of the 5 years that surveys have been completed. The remaining